UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/045,692	10/19/2001	Klaus H. Schug		1919

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Roberts Abokhair & Mardula, L.L.C.
Suite 1000
11800 Sunrise Valley Drive
Reston, VA 20191-5302

EXAMINER
STRANGE, AARON N

ART UNIT	PAPER NUMBER
2153	

DATE MAILED: 12/01/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)
Office Action Summary	10/045,692	SCHUG, KLAUS H.
	Examiner	Art Unit	
	Aaron Strange	2153	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on <u>23 August 2005</u>.

2a) ☒ This action is **FINAL**.   2b) ☐ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) <u>1</u> is/are pending in the application.

  4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) <u>1</u> is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.

  Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

  Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

  a) ☐ All b) ☐ Some * c) ☐ None of:

    1. ☐ Certified copies of the priority documents have been received.

    2. ☐ Certified copies of the priority documents have been received in Application No. _____.

    3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

  * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
    Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

1.   Applicant's arguments with respect to claim 1 have been considered but are moot in view of the new ground(s) of rejection.

2.   With regard to claim 1, and Applicant's assertion that "Abbott and Osborne do not teach or disclose improving the data throughput of a computer that is interoperable with a commercial off-the-shelf (COTS) operating system" (Page 4, Lines 1-3 of Remarks), it is noted that such a limitation does not appear in the rejected claims.

3.   With further regard to claim 1, and Applicant's assertion that Osborne teaches against interoperability (Page 4, Lines 10-16), the Examiner respectfully disagrees. Applicant cites Col 14, Lines 55-58 in alleged support of this assertion, but the cited section merely describes allocation of endpoints and connections. It is unclear how this teaches away from interoperability. Applicant further asserts that "The Osborne system is not interoperable with any known protocol other that Van Eicken and Cornell University's 'Active Messages' protocol" (Page 4, Lines 14-16 of Remarks). It is unclear what basis Applicant has for this assertion. Reference to the "Active Messages" protocol only appears in the background Osborne, where is it described as "similar work". Osborne simply does not disclose or even remotely suggest that it is only interoperable with the "Active Messages" protocol. Therefore, Applicant's arguments based on such a relationship are not persuasive.

Claim Rejections - 35 USC § 103

4.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

5.   Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Osborne

(US 5,790,804) in view of Abbott et al.

6.   With regard to claim 1, Osborne discloses a method comprising:

integrating a software library with a commercial off-the-shelf (COTS) operating

system (OS) of a computer (Col 6, Lines 51-64), wherein the software library comprises

a network interface unit (NIU) driver (drivers are required for network interfaces to

function)(Col 6, Lines 26-30);

opening the NIU driver in response to a notification that network communicated

data directed to an application has been received by a NIU of the computer ();

transferring the network communicated data from the NIU of the computer to a

COTS OS memory buffer (Col 7, Lines 37-41);

mapping an application memory buffer to the COTS OS memory buffer, wherein

the mapping is accomplished by the NIU driver (Col 7, Lines 63-65);

executing standard communication protocols on the network communicated data

to obtain application data(Col 7, Lines 50-54);

transferring the application data to the COTS OS memory buffer (Col 7, Lines 50-

54); and

processing the application data at the application, wherein the application data is

acquired by the application from the application memory buffer (Col 7, Lines 54-56).

Osborne fails to specifically disclose an integrated protocol processing (IPP) loop

for execution of the communication protocols.

Abbott teaches a method for improving the internal computer throughput rate of

network communicated data comprising: executing communication protocols in an

integrated protocol processing loop (Pages 600-601, Sections 1 and A) by having the

integrated protocol processing loop perform all protocol data manipulation functions on

the data in a single loop (Page 602, Section II) on computer word size segments of the

data (Page 602, Section A), calculating communication protocol checksums one

computer word size of data at a time within the integrated protocol processing loop

(Page 602-603, Section B). This would have been an advantageous addition to the

system disclosed by Osborne since it would have allowed multiple operations to be

performed within a single loop, increasing performance (Page 600-601, Section A, ¶4).

Therefore, it would have been obvious to one of ordinary skill in the art at the

time the invention was made to use an IPP loop to execute communication protocols

since it would have allowed multiple operations to be performed in a single loop,

dramatically increasing network throughput.

Conclusion

7.   Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

8.   Any inquiry concerning this communication or earlier communications from the examiner should be directed to Aaron Strange whose telephone number is 571-272-3959. The examiner can normally be reached on M-F 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glen Burgess can be reached on 571-272-3949. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free).

AS
11/22/2005

GLENTON B. BURGESS
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100 .